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Education

M.A., Astronomy, 1985, Columbia University, New York.
B.A., (double major) Applied Mathematics, Physics, 1983, Barnard College, New York.

- Second alternate for Grace Potter Rice Fellowship.
- Honors in Applied Mathematics.
- Dean's List: 1979-1982.

Employment

NOAA/Geophysical Fluid Dynamics Laboratory, Princeton, New Jersey.
11/06-present: Physical Scientist
Berkeley Atmospheric Sciences Center, University of California, Berkeley.
6/98-11/06: Programmer/Analyst III
Department of Applied Physics & Nuclear Engineering, Columbia University.
7/92-5/98: Senior Staff Associate, Resident at NASA/Goddard Institute for Space Studies, New York (6/86-5/95), and University of Victoria, Victoria, B.C., Canada (6/95-5/98).
7/87-6/92: Staff Associate, Resident at NASA/GISS, New York.
6/86-6/87: Senior Staff Research Assistant, Resident at NASA/GISS, New York.
Barnard College Work Study, Resident at NASA/Goddard Institute for Space Studies, New York.
6/82-5/84: Programmer/Research Assistant, Cloud Climatology Group.

Technical Experience

Hardware: CRAY XT6, SGI Altix, IBM RS/6000, SUN, SGI Origin, IBM-SP, CRAY J-90/PVP.
Operating Systems: UNIX, Linux, Windows, Mac OS-X, MS-DOS, VM/CMS.
Software: FERRET, NCO, IDL, MATLAB, NCL, CDAT, NCARGraphics, MS Office, Adobe Illustrator.
Models:
GFDL ESM2M, ESM2G, ESM2.5M, ESM2.1, CM2M, CM2G, AM2, MOM4p1, GOLD, LM3, LM3v, SIS.
NCAR CCSM, CAM, CCM3, NCOM, POP, LSM, CLM, MATCH.
GISS CGCM, GISS-UCB TTM, AGCM, Bryan-Cox OGCM.
Other CASA, SLAVE, CENTURY, SiB.
Languages: Fortran 77, Fortran 90, C, HTML.

Professional Society Memberships

American Geophysical Union (AGU)
Earth Science Women's Network (ESWN)

Publications

John, J.G., A.M. Fiore, V. Naik, L.W. Horowitz, and J.P. Dunne, (in preparation), Climate versus emission drivers of methane lifetime from 1860-2100.
Dunne, J.P., J.G. John, A.J. Adcroft, S.M. Griffies, R.W. Hallberg, E.N. Shevliakova, R.J. Stouffer, et al., (accepted), GFDL's ESM2 global coupled climate-carbon Earth System Models Part I: Physical formulation and baseline simulation characteristics. *J. Climate*.
Dunne, J.P., J.G. John, A.J. Adcroft, S.M. Griffies, R.W. Hallberg, E.N. Shevliakova, R.J. Stouffer, et al., (submitted), GFDL's ESM2 global coupled climate-carbon Earth System Models Part II: Carbon System formulation and baseline simulation characteristics. *J. Climate*.
Gnanadesikan, A., J. P. Dunne and J. John, Understanding why the volume of suboxic waters does not increase over centuries of global warming in an Earth System Model, *Biogeosciences*, 9, 1159-1172, doi:10.5194/bg-9-1159-2012, 2012.
Gnanadesikan, A., J. P. Dunne, and J. John, What ocean biogeochemical models can tell us about bottom-up control of ecosystem variability, *ICES Journal of Marine Science*, 68, 1030-1044, 2011.
Henson, S.A., J.L. Sarmiento, J.P. Dunne, L. Bopp, I. Lima, S.C. Doney, J. John, and C. Beaulieu, Detection of anthropogenic climate change in satellite records of ocean chlorophyll and productivity, *Biogeosciences*, 7, 621-640, doi:10.5194/bg-7-621-2010.
Hoffman, F., I. Fung, J. Randerson, P. Thornton, J. Foley, C. Covey, J. John, et al., Terrestrial biogeochemistry in the community climate system model (CCSM). *Journal of Physics: Conference Series*, 46, 363-369, 2006.

- Patra P.K. et al., Sensitivity of inverse estimation of annual mean CO₂ sources and sinks to ocean-only sites versus all-sites observational networks, *Geophys. Res. Lett.*, 31, L05814, 2006.
- Friedlingstein, P., et al., Climate–Carbon Cycle Feedback Analysis: Results from the C4MIP Model Intercomparison. *J. Climate*, 19, 3337–3353. doi: 10.1175/JCLI3800.1, 2006.
- Doney, S.C., K. Lindsay, I. Fung and J. John, Natural Variability in a Stable, 1000-Year Global Coupled Climate-Carbon Cycle Simulation. *J. Climate*, 19, 3033–3054, 2006.
- Fung, I., S. Doney, K. Lindsay and J. John, Evolution of carbon sinks in a changing climate. *Proc. Nat. Acad. Sci.*, 102, 32, 11201–11206, 2005.
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- Bonfils, C., I. Fung, S. Doney, and J. John, On the detection of summertime terrestrial photosynthetic variability from its atmospheric signature. *Geophys. Res. Lett.*, 31, L09207, doi:10.1029/2004GL019453, 2004.
- Maksyutov, S., and Transcom-3 Modelers, Effect of recent observations on Asian CO₂ flux estimates by transport model inversions. *Tellus*, 55B, 522–529, 2003.
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- Gurney, K.R., R.M. Law, and TransCom3 modellers, Towards robust regional estimates of CO₂ sources and sinks using atmospheric transport models. *Nature*, 415, 626–630, 2002.
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Acknowledgments*

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- *Tans, P., I. Fung, and T. Takahashi, Observational constraints on the global atmospheric CO₂ budget, *Science*, 247, 1431-1438, 1990.

Presentations

- AGU 2011 - Poster Presentation: "Key Drivers of Methane Lifetime from 1860-2100"
 (Collaboration with A. Fiore, V. Naik, L. Horowitz).
- AGU 2010 - Poster Presentation: "How Coupled are Ocean Heat and Carbon Uptake?"
 (Collaboration with J. Dunne).

Outreach

- 2011 Young Women's Conference in Science, Engineering, Technology and Mathematics, Princeton Plasma Physics Laboratory – Poster Presentation: "Projecting the Future with Earth System Modeling"
- 2010 Young Women's Conference in Science, Engineering, Technology and Mathematics, Princeton Plasma Physics Laboratory – Poster Presentation: "Projecting the Future with Climate and Earth System Modeling"